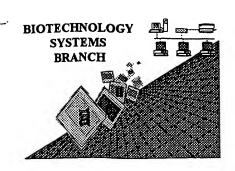
Railey

RAW SEQUENCE LISTING ERROR REPORT



The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following CRF diskette:

Application Serial Number: 09//22384Art Unit / Team No.: 1636Date Processed by STIC: 12/10/98

THE ATTACHED PRINTOUT EXPLAINS THE ERRORS DETECTED.

PLEASE BE SURE TO FORWARD THIS INFORMATION TO THE APPLICANTS BY EITHER:

- 1) INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE APPLICANTS ALONG WITH A NOTICE TO COMPLY or,
- 2) CALLING APPLICANTS AND FAXING THEM A COPY OF THE PRINTOUT WITH A NOTICE TO COMPLY

THIS WILL INSURE THAT THE NEXT SUBMISSION RECEIVED FROM THEM WILL BE ERROR FREE.

IF YOU HAVE ANY FURTHER QUESTIONS, PLEASE CALL:

ARTI SHAH 703-308-4212

J. Poiley

PAGE:

1

RAW SEQUENCE LISTING PATENT APPLICATION US/09/122,384

DATE: 12/10/1998

TIME: 09:17:03

```
This Raw Listing contains the General
Section and up to first 5 pages.

110> MANDATORY numeric identificia and response readed

120> marketory numeric identificia and response if filled before assignment

130> marketory numeric identificia and response if filled before assignment

140> US/09/122,384

141> 1998-07-24

160> MANDATORY numeric identificia and response Composes Nos Compose

170> Patentin Ver. 2.0

(32 Irona

To file)

1806

1806

1806

1806

1806

1806

1806

1806

1806

1806

1806

1806

1806

1806

1806

1806

1806

1806

1806

1806

1806

1806

1806

1806

1806

1806

1806

1806

1806

1806

1806

1806

1806

1806

1806

1806

1806

1806

1806

1806

1806

1806

1806

1806

1806

1806

1806

1806

1806

1806

1806

1806

1806

1806

1806

1806

1806

1806

1806

1806

1806

1806

1806

1806

1806

1806

1806

1806

1806

1806

1806

1806

1806

1806

1806

1806

1806

1806

1806

1806

1806

1806

1806

1806

1806

1806

1806

1806

1806

1806

1806

1806

1806

1806

1806

1806

1806

1806

1806

1806

1806

1806

1806

1806

1806

1806

1806

1806

1806

1806

1806

1806

1806

1806

1806

1806

1806

1806

1806

1806

1806

1806

1806

1806

1806

1806

1806

1806

1806

1806

1806

1806

1806

1806

1806

1806

1806

1806

1806

1806

1806

1806

1806

1806

1806

1806

1806

1806

1806

1806

1806

1806

1806

1806

1806

1806

1806

1806

1806

1806

1806

1806

1806

1806

1806

1806

1806

1806

1806

1806

1806

1806

1806

1806

1806

1806

1806

1806

1806

1806

1806

1806

1806

1806

1806

1806

1806

1806

1806

1806

1806

1806

1806

1806

1806

1806

1806

1806

1806

1806

1806

1806

1806

1806

1806

1806

1806

1806

1806

1806

1806

1806

1806

1806

1806

1806

1806

1806

1806

1806

1806

1806

1806

1806

1806

1806

1806

1806

1806

1806

1806

1806

1806

1806

1806

1806

1806

1806

1806

1806

1806

1806

1806

1806

1806

1806

1806

1806

1806

1806

1806

1806

1806

1806

1806

1806

1806

1806

1806

1806

1806

1806

1806

1806

1806

1806

1806

1806

1806
E-->
E-->
                3
                4
                5
B-->
                6
                7
                8
                9
               10
               11
                        <213> Artificial Sequence
               12
                        <223> Description of Artificial Sequence: Synthetic
               13
                        <400> 1
               14
               15
                                   aattotgtoa googttaagt gttootgtgt caotgaaaat tgotttgaga ggototaagg 60
               16
                                   getteteagt gegttacate cetggettqt tqtecacaac eqttaaacet taaaaqettt 120
               17
                                   aaaagcctta tatattcttt tttttcttat aaaacttaaa accttagagg ctatttaagt 180
               18
                                   tgctgattta tattaatttt attgttcaaa catgagagct tagtacgtga aacatgagag 240
               19
                                   cttagtacgt tagccatgag agcttagtac gttagccatg agggtttagt tcgttaaaca 300
              20
                                   tgagagetta gtaegttaaa catgagaget tagtaegtga aacatgagag ettagtaegt 360
              21
                                   actatcaaca ggttgaactg ctgatcaaca gatcctctac gcgqccgcqq taccataact 420
              22
                                   tegtatagea tacattatae gaagttatet ggaatteece gggetegaga acatatggee 480
              23
                                   atggggatcc gcggccgcaa ttgttaacag atccgtcgac gagctcgcta tcagcctcga 540
              24
                                   etgtgeette tagttgeeag ceatetgttg tttgeeecte eeeegtgeet teettgaeee 600
                                   tggaaggtgc cactcccact gtcctttcct aataaaatga ggaaattgca tcgcattgtc 660
              25
                                   tgagtaggtg tcattctatt ctggggggtg gggtggggca ggacagcaag ggggaggatt 720
              26
              27
                                  gggaagacaa tagcaggcat gctggggatt ctagaagatc cggctgctaa caaagcccqa 780
              28
                                  aaggaagetg agttggetge tgecaceget gagcaataac tagcataace cettggggee 840
              29
                                   tctaaacggg tcttgagggg ttttttgctg aaaggaggaa ctatatccgg atatcccggg 900
              30
                                  gtgggcgaag aactccagca tgagatcccc gcgctggagg atcatccagc cggcgtcccg 960
              31
                                  gaaaacgatt ccgaagccca acctttcata gaaggcggcg gtggaatcga aatctcgtga 1020
              32
                                  tggcaggttg ggcgtcgctt ggtcggtcat ttcgaacccc agagtcccgc tcagaagaac 1080
              33
                                   tegteaagaa ggegatagaa ggegatgege tgegaategg gageggegat acegtaaage 1140
              34
                                  acgaggaagc ggtcagccca ttcgccgcca agctcttcag caatatcacg ggtagccaac 1200
              35
                                  gctatgtcct gatagcggtc cgccacaccc agccggccac agtcgatgaa tccagaaaag 1260
              36
                                  cggccatttt ccaccatgat attcggcaag caggcatcgc catgggtcac gacgagatcc 1320
                                  togoogtogg goatgoggo cttgagcotg gogaacagtt cggctggcgc gagccoctga 1380
              37
              38
                                  tgctcttcgt ccagatcatc ctgatcgaca agaccggctt ccatccgagt acqtqctcqc 1440
                                  togatgogat gtttcgcttg gtggtcgaat gggcaggtag ccggatcaag cgtatgcagc 1500
              39
                                  cgccgcattg catcagccat gatggatact ttctcggcag gagcaaggtg agatgacagg 1560
              40
              41
                                  agatectgcc eeggeactte geecaatage agecagtece tteeegette aqtqacaacq 1620
              42
                                  tegageacag etgegeaagg aacgeeegte gtggeeagee acgatageeg egetgeeteg 1680
              43
                                  tectgeagtt catteaggge aceggaeagg teggtettga caaaaagaac egggegeece 1740
              44
                                  tgcgctgaca gccggaacac ggcggcatca gagcagccga ttgtctgttg tgcccagtca 1800
```

DATE: 12/10/1998 TIME: 09:17:03 RAW SEQUENCE LISTING PAGE: 2

PATENT APPLICATION US/09/122,384

45		tagccgaata gcctctccac ccaagcggcc ggagaacctg cgtgcaatcc atcttgttca	
46		atcatgcgaa acgatcctca tcctgtctct tgatcagatc ttgatcccct gcgccatcag	
47		atccttggcg gcaagaaagc catccagttt actttgcagg gcttcccaac cttaccagag	
48		ggcgccccag ctggcaattc cggttcgctt gctgtccata aaaccgccca gtctagctat	
49		cgccatgtaa gcccactgca agctacctgc tttctctttg cgcttgcgtt ttcccttgtc	
50		cagatagece agtagetgae atteateegg ggteageace gtttetgegg aetggettte	2160
51		tacgtgttcc gcttccttta gcagcccttg cgccctgagt gcttgcggca gcgtgaagct	2220
52	<210>	2	
53	<211>	16	
54	<212>	DNA	
55	<213>	Artificial Sequence	
56	<220>		
57	<223>	Description of Artificial Sequence: Synthetic	
58	<400>	2	
59		ggatccccgg gaattc	16
60	<210>	3	
61	<211>	36	
62	<212>	DNA	
63	<213>	Artificial Sequence	
64	<220>		
65	<223>	Description of Artificial Sequence: Synthetic	
66	<400>	3	
67		ggatcgcata tgcccatggc tcgaggatcc gaattc	36
68	<210>	4	
69	<211>	42	
70	<212>	DNA	
71	<213>	Artificial Sequence	
72	<220>		
73	<223>	Description of Artificial Sequence: Synthetic	
74	<400>	4	
75		catggctata acttcgtata gcatacatta tacgaagtta tg	42
76	<210>	5	
77	<211>	42	
78	<212>	DNA	
79	<213>	Artificial Sequence	
80	<220>		
81	<223>	Description of Artificial Sequence: Synthetic	
82	<400>	5 .	
83		gatccataac ttcgtataat gtatgctata cgaagttata gc	42
84	<210>	6	
85	<211>	46	
86	<212>	DNA	
87	<213>	Artificial Sequence	
88	<220>		
89	<223>	Description of Artificial Sequence: Synthetic	
90	<400>	6	
91		ggccggacgt cataacttcg tatagcatac attatacgaa gttatg	46
92	<210>	7	
93	<211>	46	
94	<212>	DNA	

PAGE: 3 RAW SEQUENCE LISTING DATE: 12/10/1998

PATENT APPLICATION US/09/122,384 TIME: 09:17:03

```
95
      <213> Artificial Sequence
 96
      <220>
 97
      <223> Description of Artificial Sequence: Synthetic
 98
 99
            gatccataac ttcgtataat gtatgctata cgaagttatg acgtcc
                                                                               46
100
      <210> 8
101
      <211> 46
      <212> DNA
102
103
      <213> Artificial Sequence
104
105
      <223> Description of Artificial Sequence: Synthetic
106
      <400> 8
107
            tcgagacgtc ataacttcgt atagcataca ttatacgaag ttatqc
                                                                               46
108
      <210> 9
109
      <211> 46
110
      <212> DNA
111
      <213> Artificial Sequence
112
113
      <223> Description of Artificial Sequence: Synthetic
114
115
            ggccgcataa cttcgtataa tgtatgctat acgaagttat qacqtc
                                                                               46
116
      <210> 10
117
      <211> 1740
118
      <212> DNA
119
      <213> Artificial Sequence
120
      <223> Description of Artificial Sequence: Synthetic
121
122
      <400> 10
123
            atgtccccta tactaggtta ttggaaaatt aagggccttg tgcaacccac tcgacttctt 60
124
            ttggaatatc ttgaagaaaa atatgaagag catttgtatg agcgcgatga aggtgataaa 120
125
            tggcgaaaca aaaagtttga attgggtttg gagtttccca atcttcctta ttatattgat 180
126
            ggtgatgtta aattaacaca gtctatggcc atcatacgtt atatagctga caagcacaac 240
            atgttgggtg gttgtccaaa agagcgtgca gagatttcaa tgcttgaagg agcggttttg 300
127
128
            gatattagat acggtgtttc gagaattgca tatagtaaag actttgaaac tctcaaagtt 360
129
            gattttctta gcaagctacc tgaaatgctg aaaatgttcg aagatcgttt atgtcataaa 420
130
            acatatttaa atggtgatca tgtaacccat cctgacttca tgttgtatga cgctcttgat 480
131
            gttgttttat acatggaccc aatgtgcctg gatgcgttcc caaaattagt ttgttttaaa 540
132
            aaacgtattg aagctatccc acaaattgat aagtacttga aatccagcaa gtatatagca 600
133
            tggcctttgc agggctggca agccacgttt ggtggtggcg accatectec aaaateggat 660
134
            ctggttccgc gtggatctcg tcgtgcatct gttggatcgc atatgcccat ggccaattta 720
135
            ctgaccgtac accaaaattt gcctgcatta ccggtcgatg caacgagtga tgaggttcgc 780
136
            aagaacctga tggacatgtt cagggatcgc caggcgtttt ctgagcatac ctggaaaatg 840
137
            cttctgtccg tttgccggtc gtgggcggca tggtgcaagt tgaataaccg gaaatggttt 900
            cccgcagaac ctgaagatgt tcgcgattat cttctatatc ttcaggcgcg cggtctggca 960
138
139
            gtaaaaacta tccagcaaca tttgggccag ctaaacatgc ttcatcgtcg gtccgggctg 1020
140
            ccacgaccaa gtgacagcaa tgctgtttca ctggttatgc ggcggatccg aaaagaaaac 1080
141
            gttgatgccg gtgaacgtgc aaaacaggct ctagcgttcg aacgcactga tttcgaccag 1140
142
            gttcgttcac tcatggaaaa tagcgatcgc tgccaggata tacgtaatct ggcatttctg 1200
143
            gggattgctt ataacaccct gttacgtata gccgaaattg ccaggatcag ggttaaagat 1260
144
            atctcacgta ctgacggtgg gagaatgtta atccatattg gcagaacgaa aacgctggtt 1320
```

PAGE: 4 RAW SEQUENCE LISTING

DATE: 12/10/1998 TIME: 09:17:03 PATENT APPLICATION US/09/122,384

145					_		_	_	-			_					cgatgg	
146						-	_			-			_	_			agaaaa	
147						_		-	-		-						gggatt	
148										_							tacctg	
149		gcc	gcctggtctg gacacagtgc ccgtgtcgga gccgcgcgag atatggcccg cgctggagtt 1620														1620	
150		tcaataccgg agatcatgca agctggtggc tggaccaatg taaatattgt catgaactat 1680														1680		
151		atc	cgta	acc	tggai	tagt	ga a	acag	gggc	a atq	ggtg	cgcc	tgc	tgga	aga	tggc	gattag	1740
152	<210>	11																
153	<211>	579																
154	<212>	PRT																
155	<213>	Artificial Sequence																
156	<220>	·																
157	<223>	Description of Artificial Sequence: Synthetic																
158	<400>	11																
159		Met	Ser	Pro	Ile	Leu	Gly	Tyr	Trp	Lys	Ile	Lys	Gly	Leu	Val	Gln	Pro	
160		1				5					10					15		
161		Thr	Arg	Leu	Leu	Leu	Glu	Tyr	Leu	Glu	Glu	Lys	Tyr	Glu	Glu	His	Leu	
162					20					25					30			
163		Tyr	Glu	Arg	Asp	Glu	Gly	Asp	Lys	Trp	Arg	Asn	Lys	Lys	Phe	Glu	Leu	
164				35					40					45				
165		Gly	Leu	Glu	Phe	Pro	Asn	Leu	Pro	Tyr	Tyr	Ile	Asp	Gly	Asp	Val	Lys	
166			50					55					60					
167		Leu	Thr	Gln	Ser	Met	Ala	Ile	Ile	Arg	Tyr	Ile	Ala	Asp	Lys	His	Asn	
168		65					70					75					80	
169		Met	Leu	Gly	Gly	Cys	Pro	Lys	Glu	Arg	Ala	Glu	Ile	Ser	Met	Leu	Glu	
170						85					90					95		
171		Gly	Ala	Val	Leu	Asp	Ile	Arg	Tyr	Gly	Val	Ser	Arg	Ile	Ala	Tyr	Ser	
172					100					105					110			
173		Lys	Asp	Phe	Glu	Thr	Leu	Lys	Val	Asp	Phe	Leu	Ser	Lys	Leu	Pro	Glu	
174				115					120					125				
175		Met	Leu	Lys	Met	Phe	Glu	Asp	Arg	Leu	Cys	His	Lys	Thr	Tyr	Leu	Asn	
176			130					135					140					
177		Gly	Asp	His	Val	Thr	His	Pro	Asp	Phe	Met	Leu	Tyr	Asp	Ala	Leu	Asp	
178		145					150					155					160	
179		Val	Val	Leu	Tyr	Met	Asp	Pro	Met	Cys	Leu	Asp	Ala	Phe	Pro	Lys	Leu	
180						165					170					175		
181		Val	Cys	Phe	Lys	Lys	Arg	Ile	Glu	Ala	Ile	Pro	Gln	Ile	Asp	Lys	Tyr	
182					180					185					190			
183		Leu	Lys	Ser	Ser	Lys	Tyr	Ile	Ala	Trp	Pro	Leu	Gln	Gly	Trp	Gln	Ala	
184				195					200					205				
185		Thr	Phe	Gly	Gly	Gly	Asp	His	Pro	Pro	Lys	Ser	Asp	Leu	Val	Pro	Arg	
186			210					215					220					
187		Gly	Ser	Arg	Arg	Ala	Ser	Val	Gly	Ser	His	Met	Pro	Met	Ala	Asn	Leu	
188		225					230					235					240	
189		Leu	Thr	Val	His	Gln	Asn	Leu	Pro	Ala	Leu	Pro	Val	Asp	Ala	Thr	Ser	
190						245					250					255		
191		Asp	Glu	Val	Arg	Lys	Asn	Leu	Met	Asp	Met	Phe	Arg	Asp	Arg	Gln	Ala	
192					260					265					270			
193		Phe	Ser		His	Thr	Trp	Lys	Met	Leu	Leu	Ser	Val	Cys	Arg	Ser	Trp	
194				275					280					285				

PAGE: 5 RAW SEQUENCE LISTING DATE: 12/10/1998

PATENT APPLICATION US/09/122,384 TIME: 09:17:03

195	Ala	Ala	Trp	Cys	Lys	Leu	Asn	Asn	Arg	Lys	Trp	Phe	Pro	Ala	Glu	Pro
196		290					295					300				
197	Glu	Asp	Val	Arg	Asp	Tyr	Leu	Leu	Tyr	Leu	Gln	Ala	Arg	Gly	Leu	Ala
198	305					310					315					320
199	Val	Lys	Thr	Ile	Gln	Gln	His	Leu	Gly	Gln	Leu	Asn	Met	Leu	His	Arg
200					325					330					335	
201	Arg	Ser	Gly	Leu	Pro	Arg	Pro	Ser	Asp	Ser	Asn	Ala	Val	Ser	Leu	Val
202				340					345					350		
203	Met	Arg	Arg	Ile	Arg	Lys	Glu	Asn	Val	Asp	Ala	Gly	Glu	Arg	Ala	Lys
204			355					360					365			
205	Gln	Ala	Leu	Ala	Phe	Glu	Arg	Thr	Asp	Phe	Asp	Gln	Val	Arg	Ser	Leu
206		370					375					380				
207	Met	Glu	Asn	Ser	Asp	Arg	Cys	Gln	Asp	Ile	Arg	Asn	Leu	Ala	Phe	Leu
208	385					390					395					400
209	Gly	Ile	Ala	Tyr	Asn	Thr	Leu	Leu	Arg	Ile	Ala	Glu	Ile	Ala	Arg	Ile
210					405					410					415	
211	Arg	Val	Lys	Asp	Ile	Ser	Arg	Thr	Asp	Gly	Gly	Arg	Met	Leu	Ile	His
212				420					425					430		
213	Ile	Gly	Arg	Thr	Lys	Thr	Leu	Val	Ser	Thr	Ala	Gly	Val	Glu	Lys	Ala
214			435					440					445			
215	Leu	Ser	Leu	Gly	Val	Thr	Lys	Leu	Val	Glu	Arg	Trp	Ile	Ser	Val	Ser
216		450					455					460				
217		Val	Ala	Asp	Asp		Asn	Asn	Tyr	Leu		Cys	Arg	Val	Arg	Lys
218	465					470					475					480
219	Asn	Gly	Val	Ala		Pro	Ser	Ala	Thr		Gln	Leu	Ser	Thr	_	Ala
220			_		485	_	_			490					495	
221	Leu	Glu	Gly		Phe	Glu	Ala	Thr		Arg	Leu	Ile	Tyr	_	Ala	Lys
222				500	_				505					510		
223	Asp	Asp		Gly	Gln	Arg	Tyr		Ala	Trp	Ser	Gly		Ser	Ala	Arg
224			515	_ •	_	_		520				_	525	_		_
225	Val	Gly	Ala	Ala	Arg	Asp		Ala	Arg	Ala	Gly		Ser	Ile	Pro	Glu
226		530	~ 3				535	_,	_		_	540			_	_
227		Met	GIN	Ата	GTA	-	Trp	Thr	Asn	Val		īīe	Val	Met	Asn	_
228	545	•	•			550	~7	-1	~1		555	•	_	_	_	560
229	тте	Arg	Asn	ьeu		ser	GIU	Inr	GLY		Met	val	Arg	Leu		GIu
230	3	~1. -	3		565					570					575	
231	qzA	Gly	Asp													

PAGE: 6

VERIFICATION SUMMARY
PATENT APPLICATION US/09/122,384

DATE: 12/10/1998 TIME: 09:17:03

Input Set: I122384.RAW

Line ? Error/Warning Original Text

1 E Response to "Applicant" Name is Missing

- 2 E Response to "Title of Invention" Missing
- 3 W Response to "File Reference" is Missing
- 6 E # of Seq. 0 Not Equal Actual 32